MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2019/2020

DBM5624 – PRINCIPLE OF FINANCE

(All Sections/Groups)

21 OCTOBER 2019
2.30 p.m – 4.30 p.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 8 pages with 2 sections.
2. Attempt **ALL** questions.
3. Please write all your answers for Section A on the OMR form provided and all answers for Section B in the Answer Booklet provided.
4. The formulae are given in the appendix.

SECTION A: Multiple Choice Questions (30 Marks)

1. The basic format of an income statement is _____.

   A. Sales - Expenses = Profits
   B. Income - Expenses = EBIT
   C. Sales - Liabilities = Profits
   D. Assets - Liabilities = Profits

2. Which of the following statements concerning net income is **MOST** correct?

   A. Net income represents cash available to pay dividends.
   B. Net income represents sales minus operating expenses at a specific point in time.
   C. Negative net income reduces a company's cash balance.
   D. Net income represents income that may be reinvested in the firm or distributed to its owners.

3. The increase in owners equity for a given period is equal to _____

   A. positive net cash flow minus dividends.
   B. net income minus dividends.
   C. sales minus dividends.
   D. gross profit minus distributions to shareholders.

4. A firm's financing costs include _____

   A. depreciation expense.
   B. interest exposure.
   C. costs of goods sold.
   D. both A and B.

5. All of the following are equity accounts on a balance sheet **EXCEPT**:

   A. retained earnings.
   B. cash.
   C. common stock.
   D. paid-in capital.

6. Net working capital is equal to _____

   A. total assets minus total liabilities.
   B. current assets minus total liabilities.
   C. total operating capital minus net income.
   D. current assets minus current liabilities.

Continued ...

7. What information does a firm's balance sheet provide to the viewing public?

   A. A report of investments made and their cost for a specific period of time.
   B. A complete listing of all of a firm's cash receipts and cash expenditures for a defined period of time.
   C. A report of revenues and expenses for a defined period of time.
   D. An itemisation of all of a firm's assets, liabilities, and equity as of the balance sheet date.

8. Sunflower's Supply has sales of RM387,000 and costs of RM294,500. The depreciation expense is RM43,800. Interest paid equals RM18,200 and dividends paid equal RM6,500. The tax rate is 35 percent. What is the addition to retained earnings?

   A. RM10,775
   B. RM11,460
   C. RM13,120
   D. RM13,325

9. The financial statements of Electrical and Power Corporation reflect depreciation expenses of RM21,600 and interest expenses of RM27,900 for the year. The current assets increased by RM31,800 and the net fixed assets increased by RM28,600. What is the amount of the net capital spending for the year?

   A. RM50,200
   B. RM28,600
   C. RM21,600
   D. RM7,000

10. The balance sheet of LTKK shows current liabilities of RM46,300 and long-term debt of RM189,200 as of 2017. Current liabilities are RM56,900 and long-term debt is RM248,750 as of end of the year 2018. What is the amount of the net new borrowing?

    A. RM51,450
    B. RM59,550
    C. RM64,750
    D. RM70,150

11. Tilahi is buying a car and will finance it with a loan which requires monthly payments of RM500 for the next 5 years. His car payments can be described by which one of the following terms?

    A. Perpetuity.
    B. Annuity.
    C. Lump sum.
    D. Factor.

Continued ...

12. Which one of the following can be classified as an annuity?

    A. Increasing monthly payments forever.
    B. Unequal payments each year for 9 years.
    C. Equal annual payments for 8 years.
    D. Increasing quarterly payments for 6 years.

13. Ci Hui is taking out a loan today. The cash amount that she will receive today is equal to the present value of the lump sum payment which she will be required to pay 2 years from today. Which type of loan is this?

    A. Compound.
    B. Interest-only.
    C. Pure discount.
    D. Amortised.

14. Anas Development Sdn. Bhd. has just signed a RM2.2 million contract. The contract calls for a payment of RM0.6 million today, RM0.8 million one year from today, and RM0.8 million two years from today. What is this contract worth today if the firm can earn 7.2 percent on its money?

    A. RM2,038,616.67
    B. RM2,042,414.79
    C. RM2,108,001.32
    D. RM2,124,339.07

15. A preferred stock pays an annual dividend of RM7. What is one share of this stock worth to you today if you require a 14 percent rate of return?

    A. RM6.14
    B. RM7.98
    C. RM43.00
    D. RM50.00

16. What is the effective annual rate of 13.9 percent compounded quarterly?

    A. 14.64 percent.
    B. 14.37 percent.
    C. 13.82 percent.
    D. 13.23 percent.

17. Glamour Clothing charges a daily rate of 0.05 percent on its store credit cards. What interest rate is the company required by law to report to potential customers?

    A. 17.99 percent.
    B. 18.25 percent.
    C. 19.50 percent.
    D. 20.02 percent.

Continued ...

18. Assuming two investments have equal lives, a high discount rate tends to favour _____

A. the investment with large cash flow early.
B. the investment with large cash flow late.
C. the investment with even cash flow.
D. neither investment since they have equal lives.

19. You have the choice of two equally risk annuities, each paying RM5,000 per year for 8 years. One is an annuity due and the other is an ordinary annuity. If you are going to be receiving the annuity payments, which annuity would you choose to maximise your wealth?

A. The annuity due.
B. The ordinary annuity.
C. Since we do not know the interest rate, we cannot find the value of the annuities and hence we cannot tell which one is better.
D. Either one because they have the same present value.

20. The present value of a single future sum _____

A. increases as the number of discount periods increases.
B. is generally larger than the future sum.
C. depends upon the number of discount periods.
D. increases as the discount rate increases.

21. Which one of the following is the need to hold cash simply as a financial reserve?

A. Precautionary motive.
B. Opportunistic motive.
C. Speculative motive.
D. Transaction motive.

22. Which one of the following is a disbursement account into which funds are transferred from a master account only as the funds are needed to cover checks presented for payment?

A. Lockbox account.
B. Cash concentration account.
C. Ledger account.
D. Zero-balance account.

23. Which one of the following is the process of determining the probability that customers will not pay?

A. Credit analysis.
B. Collection policy.
C. Account aging.
D. Credit terms.

Continued ...

24. Which one of the following is the set of procedures used to determine the inventory levels for demand-dependent inventory?

A. Inventory flow log.
B. Materials requirements planning.
C. Just-in-time inventory system.
D. Kanban.

25. MUM Property Berhad received five checks today and went to the bank to deposit all of them. Unfortunately, the bank was closed for the day due to a robbery. How does the bank closure affect the firm's float assuming these five checks are the only outstanding bank items?

A. Collection float increased.
B. Collection float decreased.
C. Disbursement float increased.
D. Disbursement float decreased

26. Which of the following practices will reduce a firm's collection float?

I. Installing a lockbox system.
II. Utilising zero-balance accounts.
III. Depositing checks daily rather than weekly.
IV. Reducing the processing delay by one day.

A. I and III only.
B. II and IV only.
C. I, II, and III only.
D. I, III, and IV only.

27. Which one of the following statements is **CORRECT**?

A. Firms cannot use lockboxes if they use cash concentration accounts.
B. Firms prefer to increase processing delay on disbursements.
C. Firms prefer to eliminate all types of float.
D. Firms open regional offices so their employees can pick up lockbox payments throughout the day.

28. Which one of the following will tend to decrease the length of the credit period?

A. Decrease in default risk.
B. Increase in the cost of the product.
C. Increase in competition.
D. Decrease in the size of the account.

Continued ...

29. Which one of the following is **MOST** commonly used in international trades?

A. Sight draft.
B. Commercial paper.
C. Banker's acceptance.
D. Open account.

30. Which one of the following refers to a customer's willingness to meet his or her credit obligations?

A. Capital.
B. Conditions.
C. Capacity.
D. Character.

(Total: 30 marks)

Continued ...

SECTION B: Structured Questions (70 Marks)

QUESTION 1

The Aso Corporation is offering a 10-year Aso Growth Bond which is issued at par, with a coupon rate of 5.8 percent. The yield to maturity of the bond is 12 percent.

(a) Calculate the bond price if the bond compounded annually.

(8 marks)

(b) Calculate the bond price if the bond compounded quarterly. Is the bond selling at par, premium or discount? Why?

(9.5 marks)
(Total = 17.5 marks)

QUESTION 2

(a) Currently Beppu Corporation announced the company next dividend will increase by 5 percent and will maintain for 2 years and thereafter the dividends will increase by 3 percent annually. The required return on this stock is 15 percent.

(i) Calculate the share price if the company just paid RM0.80 dividends.

(9.5 marks)

(ii) If the market price of the share is RM8.00, will you invest? Justify your answer?

(2 marks)

(b) Briefly explain the **THREE (3)** types of voting right.

(6 marks)
(Total = 17.5 marks)

QUESTION 3

(a) The Kumamon Sdn. Bhd. will like to build a bear park near Bukit Beruang. The project will need RM3.45 million and the management estimated the bear park will generate cash inflows of RM1.5 million for the first year and RM800,000 for the following three years.

(i) Calculate the net present value if the required return for this project is 15 percent. Should the company accept or reject this project?

(9.5 marks)

(ii) Calculate the payback period for this project. Should the company accept or reject if the preset year is 3 years?

(7 marks)

(b) Name any **ONE (1)** advantages of using payback period.

(1 mark)
(Total = 17.5 marks)

Continued ...

QUESTION 4

(a) Macha Corporation is considering two costing, Folio1 and Folio2. The following table showed the data collected.

Components	Cost	Weights	
		Folio1	Folio2
Debt (Before tax)	8%	30%	40%
Preferred Stock	5%	20%	30%
Common Equity	4%	50%	30%

(i) Calculate the WACC for Folio1 and Folio2 if the tax rate is 35 percent.
(9 marks)

(ii) Which Folio should the company choose and why?
(2 marks)

(b) Calculate the new number of shares if Samuel holding 3,000 share with the stock split policy as below:

(i) 2 for 5
(2.5 marks)

(ii) 8 for 3
(2.5 marks)

(c) Name any **THREE (3)** reasons why firm implement reverse stock split?
(1.5 marks)
(Total = 17.5 marks)

End of Paper

Appendix

I. The cash flow identity

Cash flow from assets = Cash flow to creditors (bondholders)
+ Cash flow to stockholders (owners)

II. Cash flow from assets

Cash flow from assets = Operating cash flow
− Net capital spending
− Change in net working capital (NWC)

where

Operating cash flow = Earnings before interest and taxes (EBIT)
+ Depreciation − Taxes

Net capital spending = Ending net fixed assets − Beginning net fixed assets
+ Depreciation

Change in NWC = Ending NWC − Beginning NWC

III. Cash flow to creditors (bondholders)

Cash flow to creditors = Interest paid − Net new borrowing

IV. Cash flow to stockholders (owners)

Cash flow to stockholders = Dividends paid − Net new equity raised

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I. Symbols

PV = Present value, what future cash flows are worth today

FV_t = Future value, what cash flows are worth in the future

r = Interest rate, rate of return, or discount rate per period typically , but not always, one year

t = Number of periods typically , but not always, the number of years

C = Cash amount

II. Future value of *C* invested at *r* percent per period for *t* periods

$FV_t = C \times (1 + r)^t$

The term $(1 + r)^t$ is called the *future value factor.*

III. Present value of *C* to be received in *t* periods at *r* percent per period

$PV = C/(1 + r)^t$

The term $1/(1 + r)^t$ is called the *present value factor.*

IV. The basic present value equation giving the relationship between present and future value is

$PV = FV_t/(1 + r)^t$

I. **Symbols**

PV = Present value, what future cash flows are worth today

FV_t = Future value, what cash flows are worth in the future at time t

r = Interest rate, rate of return, or discount rate per period—typically, but not always, one year

t = Number of periods—typically, but not always, the number of years

C = Cash amount

II. **Future value of C invested per period for t periods at r percent per period**

$FV_t = C \times [(1 + r)^t - 1]/r$

A series of identical cash flows paid for a set number of periods is called an annuity, and the term $[(1 + r)^t - 1]/r$ is called the *annuity future value factor.*

III. **Present value of C per period for t periods at r percent per period**

$PV = C \times \{1 - [1/(1 + r)^t]\}/r$

The term $\{1 - [1/(1 + r)^t]\}/r$ is called the *annuity present value factor.*

IV. **Present value of a perpetuity of C per period**

$PV = C/r$

A perpetuity has the same cash flow every period forever.

I. **Finding the value of a bond**

Bond value $= C \times [1 - 1/(1 + r)^t]/r + F/(1 + r)^t$

where

C = Coupon paid each period

r = Rate per period

t = Number of periods

F = Bond's face value

II. **Finding the yield on a bond**

Given a bond value, coupon, time to maturity, and face value, it is possible to find the implicit discount rate, or yield to maturity, by trial and error only. To do this, try different discount rates in the formula above until the calculated bond value equals the given bond value. Remember that increasing the rate *decreases* the bond value.

I. **The general case**

In general, the price today of a share of stock, P_0, is the present value of all of its future dividends, $D_1, D_2, D_3, \ldots$:

$$P_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \frac{D_3}{(1+R)^3} + \cdots$$

where R is the required return.

II. **Constant growth case**

If the dividend is constant and equal to D, then the price can be written as:

$$P_0 = \frac{D}{R}$$

If the dividend grows at a steady rate, g, then the price can be written as:

$$P_0 = \frac{D_1}{R-g}$$

This result is called the *dividend growth model.*

III. **Nonconstant Growth**

If the dividend grows steadily after t periods, then the price can be written as:

$$P_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \cdots + \frac{D_t}{(1+R)^t} + \frac{P_t}{(1+R)^t}$$

where

$$P_t = \frac{D_t \times (1+g)}{(R-g)}$$

IV. **Valuation Using Multiples**

For stocks that don't pay dividends (or have erratic dividend growth rates), we can value them using the PE ratio and/or the price-sales ratio:

P_t = Benchmark PE ratio × EPS_t
P_t = Benchmark price-sales ratio × Sales per $share_t$

V. **The required return, R, can be written as the sum of two things:**

$$R = D_1/P_0 + g$$

where D_1/P_0 is the *dividend yield* and g is the *capital gains yield* (which is the same thing as the growth rate in dividends for the steady growth case).

I. **The cost of equity, R_E**

A. Dividend growth model approach (from Chapter 7):

$$R_E = D_1/P_0 + g$$

where D_1 is the expected dividend in one period, g is the dividend growth rate, and P_0 is the current stock price.

B. SML approach (from Chapter 11):

$$R_E = R_f + \beta_E \times (R_M - R_f)$$

where R_f is the risk-free rate, R_M is the expected return on the overall market, and β_E is the systematic risk of the equity.

II. **The cost of debt, R_D**

A. For a firm with publicly held debt, the cost of debt can be measured as the yield to maturity on the outstanding debt. The coupon rate is irrelevant. Yield to maturity is covered in Chapter 6.

B. If the firm has no publicly traded debt, then the cost of debt can be measured as the yield to maturity on similarly rated bonds (bond ratings are discussed in Chapter 6).

III. **The weighted average cost of capital, WACC**

A. The firm s WACC is the overall required return on the firm as a whole. It is the appropriate discount rate to use for cash flows similar in risk to the overall firm.

B. The WACC is calculated as:

$$\text{WACC} = (E/V) \times R_E + (D/V) \times R_D \times (1 - T_C)$$

where T_C is the corporate tax rate, E is the *market* value of the firm s equity, D is the *market* value of the firm s debt, and $V = E + D$. Note that E/V is the percentage of the firm s financing (in market value terms) that is equity, and D/V is the percentage that is debt.